

Amendments to the Claims

Please cancel Claims 4-5, 11-13, 17 and 20.

Please amend Claims 1, 3, 7 and 8.

Please add new Claims 21-31.

The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

What is claimed is:

1. (Currently Amended) A method of treating TNF α -mediated disease which results in joint ankylosis stiffness in a human comprising administering to the human an effective TNF α -inhibiting amount of an anti-TNF α ~~chimeric~~ antibody or antigen-binding fragment thereof, said antibody comprising a human constant region, wherein said anti-TNF α ~~chimeric-antibody or antigen-binding fragment~~ (i) competitively inhibits binding of A2 (ATCC Accession No. PTA-7045) to human TNF α ~~to anti-TNF α chimeric monoclonal antibody cA2~~, and (ii) binds to a neutralizing epitope of human TNF α *in vivo* with an affinity of at least 1×10^8 liter/mole, measured as an association constant (K_a), as determined by Scatchard analysis.
2. (Canceled)
3. (Currently Amended) A method of treating TNF α -mediated disease which results in joint ankylosis stiffness in a human comprising administering to the human an effective TNF α -inhibiting amount of anti-TNF α ~~chimeric monoclonal antibody cA2~~ or antigen-binding fragment thereof, said antibody comprising a human IgG1 constant region, wherein said anti-TNF α antibody or antigen-binding fragment (i) competitively inhibits binding of A2 (ATCC Accession No. PTA-7045) to human TNF α , and (ii) binds to a neutralizing epitope of human TNF α *in vivo* with an affinity of at least 1×10^8 liter/mole, measured as an association constant (K_a), as determined by Scatchard analysis.

Claims 4-6. (Canceled).

7. (Currently Amended) A method of treating TNF α -mediated disease which results in joint ankylosis stiffness in a human comprising administering to the human an effective TNF α -inhibiting amount of an anti-TNF α ~~chimeric~~ antibody, wherein said anti-TNF α ~~chimeric~~ antibody comprises a human constant region and a non-human variable region comprising an amino acid sequence selected from the group consisting of SEQ ID NO.:3 and SEQ ID NO.:5.
8. (Currently Amended) A method of treating TNF α -mediated disease which results in joint ankylosis stiffness in a human comprising administering to the human an effective TNF α -inhibiting amount of an anti-TNF α ~~chimeric~~ antibody, wherein said anti-TNF α ~~chimeric~~ antibody comprises an IgG1 human constant region and a non-human variable region comprising an amino acid sequence selected from the group consisting of SEQ ID NO.:3 and SEQ ID NO.:5.
9. (Original) The method of Claim 7 wherein the non-human variable region comprises a polypeptide encoded by a nucleic acid sequence selected from the group consisting of SEQ ID NO.:2 and SEQ ID NO.: 4.
10. (Original) The method of Claim 8 wherein the non-human variable region comprises a polypeptide encoded by a nucleic acid sequence selected from the group consisting of SEQ ID NO.:2 and SEQ ID NO.: 4.

Claims 11-13. (Canceled).

14. (Previously Presented) The method of Claim 1 wherein said anti-TNF α antibody is administered to the human by means of parenteral administration.

15. (Previously Presented) The method of Claim 1 wherein said anti-TNF α antibody is administered to the human by means of intravenous administration.
16. (Previously Presented) The method of Claim 1 wherein said anti-TNF α antibody is administered to the human by means of subcutaneous administration or intramuscular administration.
17. (Canceled).
18. (Previously Presented) The method of Claim 1 wherein said TNF α -inhibiting amount of the anti-TNF α antibody comprises a single or divided dose of about 0.1 - 50 mg/kg.
19. (Previously Presented) The method of Claim 18 wherein said single or divided dose is selected from the group consisting of: about a 0.1 - 1 mg/kg dose, about a 1.0 - 5 mg/kg dose, about a 5 - 10 mg/kg dose and about a 10 - 20 mg/kg dose.
20. (Canceled).
21. (New) The method of Claim 1, wherein said antigen-binding fragment is selected from the group consisting of Fab, Fab', F(ab')₂ and Fv.
22. (New) The method of Claim 1, wherein said antibody or antigen-binding fragment is of immunoglobulin class IgA, IgG1, IgG2, IgG3, IgG4 or IgM.
23. (New) The method of Claim 1, wherein said antibody or antigen-binding fragment comprises a human constant region and a human variable region.
24. (New) The method of Claim 1, wherein said antibody or antigen-binding fragment comprises at least one human light chain and at least one human heavy chain.

25. (New) The method of Claim 1, further comprising administering to the human an effective amount of an anti-inflammatory agent effective to treat the TNF α -mediated disease which results in joint stiffness.
26. (New) The method of Claim 25, wherein the anti-inflammatory agent is selected from the group consisting of: pentasa, mesalazine, asacol, benorylate, fenbufen, etodolac, indomethacin and aspirin.
27. (New) The method of Claim 1, further comprising administering to the human an effective amount of a pain control agent to treat pain associated with the TNF α -mediated disease which results in joint stiffness.
28. (New) The method of Claim 27, wherein the pain control agent is selected from the group consisting of: paracetamol and dextropropoxyphene.
29. (New) The method of Claim 1, further comprising administering to the human an effective amount of a disease-modifying anti-rheumatic drug.
30. (New) The method of Claim 25, wherein the anti-inflammatory agent is selected from the group consisting of: codeine phosphate, naprosyn, diclofenac and ibuprofen.
31. (New) The method of Claim 1, further comprising administering to the human an effective amount of methotrexate.